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N. E. FARMER.

For the New England Farmer.

HOW TO RAISE PLUMS.

Sir—In the last number of the New Genesee Farmer, there is an excellent entomological article on the character and habits of the *curculio*—a destructive insect, that destroys plums before they are half developed. In consequence of the insidious and instinctive operations of the plum-weevil, this kind of fruit is really very dear in New England, and unless some certain method is speedily devised for protecting the tree from the depredations of this insect, good plums cannot be raised.

I have had some experience in regard to the influence of a marine atmosphere in warding off the attacks of the curculio,—and am disposed to believe that islands on the Atlantic shore, are decidedly the best places for planting plum trees. Many years ago, an old estate was demolished in Summer street, the garden of which had several old plum trees. The executor made me a present of two of them, if taken immediately away. The ground was frozen hard, and the roots necessarily were very compactly secured in a perfect wheel of frozen earth. In a word, the trees were in a profound winter slumber, and in that condition transported in a boat to Rainsford island, down the harbor. Being well set out, in the spring they awoke, like Mr Irving's Dutchman, from a long sleep, without being at all conscious of a change of locality. They blossomed fully, and bore a tremendous crop of rich, luscious fruit, and have continued to do so every year since, undisturbed by the weevil. Last season, the wind shook off the plums when about half grown, but the curculio seems not to have an abiding place where the atmosphere is impregnated with salt as strongly as it is on islands. A large number of young, thrifty trees, of different varieties, are now doing exceedingly well at the same place. But the great point is, the successful cultivation of the plum in the interior—or in fact, every where.

In the early part of last August, I was invited to examine Judge Longworth's celebrated garden, in the city of Cincinnati. Mr Longworth, the son, very kindly pointed out objects of most interest, as we passed along. By and by we came to a cluster of full bearing plum trees. The sight was quite different from the scanty crops I had been accustomed to see in the neighborhood of Boston. He remarked that for years in succession, although they blossomed splendidly, the young fruit had invariably been ruined by the curculio, and not a specimen, therefore, of the true fruit could be obtained. Utterly discouraged with such positive bad luck, a brick pavement that extended from the house, near the trees, was carried out entirely beyond them, for convenient purposes; but had not been done before, for fear of injuring or interfering with the functions of those particular trees. As they had not perfected their fruit, owing to the unremitted annual visitations of the curculio, nothing was to be lost by carrying out the bricks quite beyond them. They were spared, in fact, as I understood it, merely because they were grown and ornamental, not on account of their productive qualities.

The year following, to their astonishment, they ripened a splendid yield of plums, and have continued to produce in the same way ever since.

Mr Longworth assured me that the curculio, the habits of which he had philosophically investigated, would not venture upon a tree, from whence, when they dropped, they could not instantly burrow in the earth. Again—under a pavement they never concealed themselves. In a word, they assuredly avoid a tree thus murally protected.

Accidentally, therefore, a sure mode of keeping off the plum-weevil has been discovered, that is effectual in Cincinnati; and the same laws enforced in Massachusetts, would unquestionably produce the same gratifying results. At all events, the process is exceedingly simple, and within the reach of every farmer and gardener. He must be exceedingly deficient in constructiveness, who cannot pave round the trunk of a tree with flat stones or brick—the outer border of which should extend as far as the limbs happen to spread.

Hoping, Mr Editor, that these observations may lead some of your readers to imitate the plan I have been describing, it would afford me unfeigned gratification to ascertain at some future day, that the plum trees of this region have been made profitable by my suggestions.

Very respectfully, your ob't serv't,
J. V. C. SMITH.

Boston, April 2d, 1844.

☞Dr. Smith has our thanks for the above communication, divulging facts whose importance can be best appreciated by those who have suffered by the destructive curculio,—and they are many. The preventive described by Dr. S. is certainly worthy of trial, and should it prove successful, one of the greatest evils the fruit-grower has to encounter, will have been subjected to his control.—Ed.

CULTURE OF THE CUCUMBER.

I will state a fact relative to the planting of cucumbers, which came under my observation, and which is worthy of being known. I shall at least give a further trial myself of its reality; though I cannot conceive there is a doubt remaining on the subject. Last spring, a friend of mine and myself were planting cucumbers at the same time. I was planting mine, as is usual, in gardens, by mixing a small portion of stable manure with the earth, and raising the hill an inch or two above the surface of the ground. Observing it, he jocosely remarked, "Let me show you how to raise cucumbers." Never having much luck in raising them, I cheerfully agreed to his proposition. He commenced by making holes in the earth, at the distance intended for the hills, that would hold about a peck—he then filled them with dry leached ashes, covering the ashes with a very small quantity of earth. The seed were then planted on a level with the surface of the ground. I was willing to see the experiment tried, but had no expectation of any thing but a loss of seed, labor and soil. But imagine my astonishment, (notwithstanding a drier season never was known, and almost a universal failure of garden vegetables,) when I beheld vines remarkably thrifty, and as fine a crop of cucumbers as any one could wish to raise, and they continued to bear for an unusually long time. I will not philosophize on the subject—but say to all, try it; and instead of throwing your ashes away apply it where it will be of use, and you will reap a rich reward.—*Ohio Farmer.*

Upon the foregoing, the editor of the Maine Cultivator says: "We last season made trial of the above plan, and found it to succeed admirably."

Ewes and Lambs.—A difficulty is sometimes experienced in making ewes own their lambs, and oftener, perhaps, when cases of twin lambs occur than at any other times. Those who desire to rear all their lambs may find a benefit in sprinkling a little fine salt over the disowned ones. This will usually attract the mother, and when once the operation of licking has been performed, there is seldom any danger of desertion. A friend assures us he has practiced this method with decided success, and no injury to the lambs may be apprehended from the application. Sheep, when about to lamb, should be moved and disturbed as little as possible, as all such disturbances, especially with young or wild ewes, greatly increase the probability of their forsaking their young.—*Ayrshire (Eng.) Agriculturist.*

Importance of Co-operation between the Farmer and Chemist.—We believe that by far the greatest obstacle to the advancement of scientific agriculture hitherto, has been the want of co-operation between the farmer and the chemist. Each has tried to move forward alone; and we may aptly apply to them the well-known story of the lame and the blind, neither of whom alone could proceed with safety, but when united arm in arm, the defects of each were fully compensated for by the superior advantages of the other. Thus the farmer, from his knowledge of *practice*, is enabled to progress in any given direction; but, from his want of acquaintance with the fundamental *principles* of his art, may be justly considered blind; whereas the chemist, however clearly he may see the end to be attained, makes but a very lame progression, owing to his ignorance of practice. Let the two but consent to become mutually dependent, and, proceeding arm-in-arm, the assured step of the well-practiced farmer will be guided in the right way by the clear-sighted knowledge of the enlightened chemist. —*Dr. Madden.*

For Candles.—Take 2 lbs. of alum for every 10 lbs. of tallow; dissolve it in water before the tallow is put in, and then melt the tallow in the alum water, with frequent stirring, and it will clarify and harden the tallow so as to make a most beautiful candle.—*Selected.*

For the New England Farmer.

SILK CULTURE AND MANUFACTURE.

Mr Editor :—I have just returned from a journey as far west as Ohio, undertaking for purposes connected with the silk business. I went out in company with a gentleman from Pittsburg, who is going largely into the business and who had spent several weeks in New England, visiting our establishments, and collecting information in regard to growing and manufacturing silk. I spent a week with him in these investigations, before leaving for the West. These are some of the results.

There has been a large increase in the manufacture of silk in New England, within the last one or two years. Several new establishments have been started in that time, and old ones that were prostrated by the mulberry speculation of 1839, have been resuscitated, and are now going on prosperously.—These establishments are employed chiefly in making sewings and twist, and and severally consume from 40 to 200 pounds raw silk weekly, amounting, in the aggregate, I should think, to twice the quantity worked up one year ago. We found one new establishment just going into operation, at Willington, Conn., for the manufacture of cords, gimps, and other trimmings. The building is over 100 feet long, three stories high, and designed for a large business. Messrs. Dale and Denmead are the owners. All our New England factories purchase all the American raw silk they can get properly reeled, and pay higher for it than for the foreign article, and yet their chief dependence is upon foreign stock.

Messrs Murray and Ryle, Patterson, N. J., commenced the business in 1840, use 150 pounds raw silk weekly, chiefly in sewings and twist. They have recently started twelve looms, and are making first rate goods.

Mrs McLanahan, Philadelphia, established a public filature in 1841, for purchasing and reeling cocoons. She also manufactures sewings and twist, and some other goods of first rate quality, and uses none but American stock.

West of the mountains, the business is carried on very differently from what it is in New England. No foreign raw silk is used in any establishment.—No sewing silk or twist of any consequence is made. The entire attention of manufacturers in that quarter is turned to plain and figured dress goods, serges, satins, velvets, ribbons, &c. &c. I brought home with me some 70 different samples of such goods, from the richest figured velvet, down to the plain and simple pongee—samples that will well bear comparison with the same kinds of goods made in England or France. The two leading establishments are Mr Rapp's, at Economy, Pa., and Mr Gill's, Mt. Pleasant, Jefferson County, Ohio, both of which were got up under the superintendence of John Fox, senior, and Sons; practical manufacturers from England, and have gone steadily forward, enlarging their operations from time to time, and finding a profitable and ready sale for their goods as fast as made. I found Mr Gill building a new factory, 50 by 20 feet, 3 stories high, to be filled with power looms for weaving plain pongees for printing. I could hear of no establishment at the West that had failed, or had been suspended, though many of them had suffered much from the want of more capital.

In regard to the production of raw silk, the West, especially the valley of the Ohio river, and its tributaries, has gone ahead of New England.—Much evidence on this point is given in the Report of the National Silk Convention, held in New York in October. Mr Gill there gives it as his opinion, that the crop of the past season in that valley is sufficient to keep 200 reels in operation through the year. The very rapid increase in that region, and its relative gain upon the East, is to be accounted for as follows :—

The mulberry speculation did not prevail at the West as in the Atlantic States, and of course about all the disastrous consequences growing out of that matter fell upon the Atlantic States, where they belonged. Western lands are all rich, and mulberry trees when put out, push forward at once, making a rapid growth of three to six feet by mid-summer. On the other hand, our Eastern lands are exhausted, and our trees will do nothing without manure, any more than our corn, and other crops. On this point many silk growers at the East have made a sad mistake, and laid the foundation for their own disappointment, and the discouragement of themselves and others. In this matter, the West have precisely the same advantages over the East in the silk business, as in other agricultural pursuits, and no more. Western farmers do everything on a larger scale than we do in the East, and they are carrying this characteristic spirit into the silk culture, and their summers are some two or three weeks longer than ours, though no better in any other respects.

I think, therefore, that the west and southwest will take the lead in the growth of silk, just as they now do in corn, and other agricultural products, and for the same general reasons, and no others. The proper question then, for eastern farmers, is not whether the west can lead us in this crop, but whether silk is not one of the best crops we can raise. We know that corn is one of our best crops, and yet we all admit that the west can and does lead us in this article. I reason about silk in the same way. Here we are, fixed upon our hills and plains, exhausted though they may be. Some of us would not abandon them for the fertile west, if we could. Some of us could not if we would. Here we are, and here we must be, and we must do something. We are on a treadmill, and it is work or die; and the only question is, what articles of production are most worthy of our cultivation ?—Sooner or later my readers will decide in favor of silk as one of the class.

I found at the West several large establishments for growing silk going into operation. Mr James O'Harn, Pittsburg, is preparing to stock 20 acres in trees this spring. Mr George Sanders, near Wheeling, Va., has already 8 or 9 acres, and is preparing to stock 50 acres more. But I will give you another line at no distant day, respecting this gentleman's operations.

At Economy, Pa., I found two power looms in operation, as an experiment. I brought with me a sample of the goods woven, a plain satin of first rate quality. At the same establishment I also found machinery in operation working up floss-silk waste, damaged and perforated cocoons, and brought with me samples of the yarn spun. It makes a beautiful and valuable article for hosiery, under dresses, and other goods. We have in New England no machinery of this kind, and of course have suffered a great loss in these articles. I would suggest to all silk growers that they hereafter preserve these articles with care, believing that a home market for them will soon be created. If the damaged and perforated cocoons are boiled out in soap and dried, they may be safely kept any length of time.

I wish to call the attention of our business men in the east, to the manufacture of silk. We now want establishments for weaving. Under our present tariff such establishments, rightly conducted, promise all reasonable profits. As to the raw material, it can be obtained in any quantity from abroad, until a sufficient supply is furnished from our own fields. It was in reference to this temporary foreign supply that the duty is fixed at only fifty cents a pound. In regard to skilful operatives and able operatives and able superintendents, there are some already in the country from England and France, and many others ready to come. For some months I have been in correspondence with a gentleman in Lyons, on this subject. He was here last season, and left us, strong in the belief that we are to be a great silk growing and silk-manufacturing people. He is fully recommended by gentlemen in New York well acquainted with him, as a man of high character, and one that thoroughly understands his business. He is now ready to come to this country and take charge of an establishment for manufacturing the best varities of French goods, and in the best style, if a capital of $60,000 can be secured for the purpose, and he will himself furnish one-fifth of that capital, that is, $12,000. His plan would be to commence the business at that point of perfection to which French skill and experience has already brought it. For this purpose he would have the latest improved French machinery, made here or there, as may be found best, and bring with him a sufficient number of operatives to carry the business, in all its parts, directly forward. He is himself fully confident of results altogether satisfactory. I mention the case in this manner for the purpose of showing that the necessary practical skill in this business can now be easily secured, and also to invite a correspondence with any gentlemen disposed to embark in such an enterprize. Names and references, together with full details of the plan, will be given to any one wishing for the same, in view of such a measure. Yours, truly,

J. R. Barbour.

Oxford, February 14.

WASTEFUL MANAGEMENT OF MANURE.

Some idea of this may be gained by analogy. Let us imagine that a farmer keeps three teams of horses, who consume, say two quarters of Oats per week. Let the farmer give one quarter each week to the horses, and dispose of the other quarter as follows :—There may possibly be some ruts in the road leading to and from his farm-yard; let him pour as many as possible of the Oats into every one of the horse-holes and ruts of this road, beginning at the gate of the yard, and proceeding to the nearest turnpike-road. There may seem much trouble in all this, but nothing valuable can ever be gained or done without trouble, and this experiment will probably always be conclusive. Some farm-yards are nicely drained, and very frequently the drains run into the horse-pond. Let the farmer insist on one of his laborers (who may possibly have some prejudice against it) pouring a good drill of Oats into every drain that leads out of the yard till it arrives at the pond, where he may throw

in a bushel or so, and if the drain terminates, as drains sometimes do, on a hard road, let him leave a small heap of Oats in every black puddle. When he shall have done this, let him cause some of the Oats to be scattered in every direction round his stable, and take every possible precaution so that the birds of the air, the mice and rats of the field, the fishes of the ponds, and the creeping things of the earth, may come in for a share of the Oats. The farmer's neighbors may call him mad, but let him not mind this. Ulysses was formerly called mad for sowing salt, but now, many people sow salt who are considered sensible, and even clever. Let the enterprising improver keep perseveringly on with this practice for—say three weeks. On or about this period, the ribs of each of his three teams, when in single harness, will probably form a very respectable representation of a park paling. At this point it is time to pause, and seriously ask himself the question, whether it is wise for a man actually to facilitate the waste and destruction of produce which it has cost him much money to gain, and the economical management of which will produce more money. That which we have imagined it possible for a farmer to do with his horsefood, is not a whit more unwise than the practice of some slovenly farmers with respect to their Manures. What Oats are to his horses,—Manure, and especially the liquid and gaseous portions of Manure, are to his fields. Every atom of earth which comes into contact with his dung, preserves for it some of its fertilising virtues, yet he accumulates it in unpaved yards. Every breath of air that passes over it becomes the vehicle for carrying the volatile gases, in which plants delight, from the farmer's dung-yard to everybody else's field; yet he keeps it for a year uncovered with mould. Every drop of rain which falls from the heavens, dissolves some of its most valuable portions, and conveys it away to loss; yet the good man never dreams of sinking a tank, in order to preserve a substance every pound of which, Liebig tells us, will suffice to grow a pound of wheat. Nothing can show more clearly than this national waste, the necessity of men being made acquainted with the laws of Nature, which can never be transgressed with impunity; which combine to ruin every man who regards them not; whilst there is not one law amongst them which, if understood, may not be made the ready and willing instrument of his will. —*Maidstone (Eng.) Gaz.*

Sea-weed as Manure.—I beg to inform your correspondent "M. T.," in reply to his inquiry in your last Gazette, that I do not live near enough to the sea to avail myself of the weed as a manure, but I have conversed with farmers who are in the habit of using it, and their account is, that for a single crop, it answers well, but that it seems to melt away in the earth. Nevertheless, the repeated use of it must, in the end, materially affect the staple of the soil; for, besides a great multitude of animalcules and small crustacea always entangled in it, a considerable quantity of inorganic substances must be thus accumulated, for it contains potash, soda, sulphur, lime and magnesia. The sea-weed is seldom carted before decomposition has begun, because the quantity of water which it contains when fresh, adds so much both to its weight and bulk; and before that process begins it would be useless.—*L. V. Harcourt, in the London Agricult. Gazette.*

DANA'S PRIZE ESSAY ON MANURES.

Section Eleventh.

Of Artificial Nitre Beds.

But there is a fashion in manures as well as in other things, and saltpetre is now so fashionable, that you may be inclined to use it. Be it so. I will show you, reader, how to make it for yourself, and at the same time form a large pile of capital mould. But as you have began to inquire a little into the reason of things, let us go a little into the reasons why the earth under all barns where cattle are kept, why the plaster of old houses and cellar walls, always afford saltpetre. You well know that this is the case, and why? We have already told you that the acid of saltpetre, that is, the aqua fortis, is formed of the air we breathe. Now alkalies and porous bodies compel the constituents of air, under certain circumstances, to unite and form aqua-fortis, and this immediately unites to the alkali and forms saltpetre. The best alkali to compel this union is ammonia. Hence, where plenty of animal matter is fermenting, or rotting, or where plenty of urine is, there, porous bodies being present, saltpetre will be formed. Now this is enough for you to understand the principle upon which I propose to you to form an artificial nitre-bed for your own use. It has been found that the manure of twentyfive cows, asses and mules, in layers of about four inches thick, with layers of the same thickness of chalky soil, first one and then the other, and now and then damped with the urine of the stable, produces from 1000 to 1200 pounds of saltpetre in four years.

The heap is formed under cover, and occasionally shovelled over. At the end of two years, it is a mass of rich mould. It is left two years longer, with an occasional turning over, but it is not wet with urine for the last few months. The dung the farmer has always; he wants the porous chalky body. This may be furnished by spent ashes, mixed up with its bulk of loam. Hence the following rule may be given: One cord of clear cow-dung, one cord of spent ashes, one cord of loam, or swamp muck. Mix the ashes and the swamp muck well, and having hard-rammed the barn cellar floor, or that under a shed, lay a bed upon it four inches thick of these mixed materials; then a layer of dung, three or four inches thick, and so on, till the pile is two or three feet high, topping off with loam. Wet it occasionally with urine, keeping it always about as moist as garden mould. Shovel over once a fortnight for two years. The pile now contains about fiftv pounds of several varieties of saltpetre, and mixed throughout with nearly three cords of excellent manure. It may therefore be now used according to the farmer's judgment. By thoughtful management, he may, after the first two years, annually collect as many fifty pounds as he employs cords of cow dung. But, however prepared, nitre affords, by its elements, nourishment to plants. All its parts act. Its alkali acts, and its acid acts.

(To be continued.)

Ingratitude.—We all shudder at the imputation of ingratitude, as a vice including all others, yet how few of us are willing to employ a moment in even contemplating that benevolent Being who called us out of nothing, privileged us with existence, and made us candidates for a glorious immortality!

MIDDLESEX CATTLE SHOW

and Plowing Match at Concord, October 2, 1844.

The Middlesex Society of Husbandman and Manufacturers hereby offer the following premiums for the encouragement of Agriculture, Manufactures, and the cultivation of trees within the County of Middlesex:

Live Stock.

For the best Fat Ox, at least expense,	$8
the next best,	6
the best bull, not under 1 yr. old, or over 3,	8
the next best,	6
the best Bull Calf, no over 12 nor under 3 months,	4
the next best,	2
the best yoke of Working Oxen,	8
the next best,	7
the next best,	6
the next best,	5
the next best,	4
the best 3 year old Steers,	6
the next best,	3
the best 2 year old Steers,	5
the next best,	3
the best yearling Steers,	4
the next best,	2
the best Calf Steers,	4
the next best,	2
the best Milch Cow,	8
the next best,	6
the next best,	4
the next best,	3
the best Milch Heifer, under 3 years old,	6
the next best,	4
the best 2 year old Heifer, not having had a calf,	5
the next best,	3
the best yearling Heifer,	4
the next best,	2
the best Heifer Calf, not over 12, nor under 3 months,	4
the next best,	2

None of the above animals, except Calves, will be entitled to premiums, unless they have been owned in the County of Middlesex, at least six months previous to the time of exhibition. Milch cows and heifers will not be entitled to a premium unless the owner furnishes a certificate, showing the mode of keeping, and quantity of milk given or butter made.

Domestic Manufactures.

For the best piece of plain Cloth, not less than 15 yards, 3-4 yard wide,	$4
the next best,	2
For the best piece of Woollen Flannel, not less than 20 yards, 3-4 wide,	4
the next best,	2
For the best Ladies' long Hose, not less than 3 pair,	2
the next best,	1
For the best piece of Woollen Frocking, not less than 16 yards, 7-8 yard wide,	4
For the best Cotton and Woollen Frocking, not less than 6 yards, 7-8 wide,	2

A written statement of the mode of preparing, and a minute and accurate account of the expense of manufacturing said articles, must be exhibited.

(Remainder in our next.)

Physical education is as indispensable to mental culture, as seed and tillage to agriculture.

SAUSSURE'S EXPERIMENTS.

To the Editor of the N. E. Farmer:

Dear Sir—I send you the following in answer to the inquiry of "A Constant Reader," in your last. The experiments of Saussure to which he refers, are those, I suppose, performed to solve the following question, proposed by "Le Congres Scientifique de France":—"Is it possible that substances of ternary and quaternary composition, can be assimilated, after having been absorbed by the roots of plants?" Among such substances, *humus*, and other organic matters of fertile soils—that is, soluble geine, and geates—Saussure considers the most important, and it is to these that his observations refer His remarks, &c. were originally published in the "Bibliotheque Universelle de Geneve," from which they were extracted by Liebig, who, appending certain strictures of his own, inserted the whole in his "*Annalen*," from which they have been copied into the London "Annals of Chymistry," the source to which I am indebted for them.

With regard, your friend and ser'vt,

Lowell, March 30, '44. SAM'L L. DANA.

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1. "*Absorption of Humate of Potassa by Beans.**

"The root of the plant was placed in a test tube of 22 millimetres (nearly nine-tenths of an inch) interior diameter, and 150 in height, (6 inches,) which contained a dark brown solution of carbonated humate of potassa, or 7 centigrammes (1 grain) of dry humic salt, containing according to analysis, 18 milligrammes (nearly 3-10 of a grain) of humus. Besides the before mentioned plant, a similar vessel, filled with a solution of the humic salt, was placed, with a view to ascertain what change would be effected in it by evaporation and the influence of the atmosphere.

"After a fortnight, the original weight of the plants, 11 grammes, (170 grains,) had increased 6 grammes (92 grains.) It had absorbed 135 grammes (about 4 1-2 oz.) of the liquid. The absorbed liquid was replaced every day by distilled water. The white roots of the plant had obtained their full length. No sediment had been deposited either on the plant or from the liquid. The latter had evidently lost in color nearly in the same proportion as if it had been diluted with twice its volume of water. These results are so striking and so easily obtained, that no doubt can exist in the mind of any one who will be at the pains to repeat the experiment.

"The liquid remaining behind, after the growth of the plant, yielded, on evaporation in a water-bath, 2 centigrammes (3-10 of a grain) of humate of potassa, containing 9 milligrammes (nearly 1-10 of a grain) of humus—a quantity which may be about equivalent to that absorbed by the plant.

2. "*Absorption of the Humate of Potassa by the common Knot-grass, (Polyganum persicaria.)*

"I plunged the roots of a Polyganum persicaria, weighing 20 grammes, (nearly 310 grains,) into a solution of 430 cubic-centimetres (6622 grains: a pint imperial of distilled water is 8780 grains:) of humate of potassa. This plant, on account of its absorbent properties as a marsh plant, is much more suited for experiments of this kind, than a bean plant.

"These 430 cubic centimetres of solution contained 0.73 grammes (a gramme is 15 4 troy grains) of dry humate of potassa: the absorbed liquid was not replaced. In the course of ten days, the liquid had diminished to 65 cubic centimetres, (1003 grains.) Its color was darker than that of the original solution, in consequence of the healthy plants absorbing the water in greater proportion than the substances held dissolved in it.

"The plant had increased in weight 3 1-2 grammes, (nearly 54 grains.) The dry saline humate which had been absorbed, must, according to the weight of the residue, have been 0.352 grammes, containing, according to analysis of the humic acid salt before and after absorption, as the composition is not invariable, 43 milligrammes (.662 grs.) of humus.

3. "*Absorption of Extract of Mould by Polyganum persicaria.*

"I macerated for two days a certain quantity of heath mould from Meudon,* in half its weight of rain water. 100 grammes (1543 grains) of the filtered liquid yielded on evaporation in a water-bath, a dark brown neutral extract, which weighed, whilst warm, 0.338 of a gramme—not an invariable result, I would observe. This substance, as is also the case with the greater part of the extractive of mould, did not contain any perfect humus. The aqueous solution deposits, however, on evaporation, a precipitate which is a modification of humus. These extractive matters are, therefore, not to be considered as solutions of humus, but rather as substances capable of producing humus. These extracts, especially the latter, are plentifully imbued with azote.

"Twelve centigrammes (nearly 2 grains) of this extract, were then mixed with 100 grammes of water, (1543 grs.): one-half of the filtered solution was taken for the nutriment of two plants, *(Polyganum persicaria)*—the other was retained in a similar vessel, which did not, however, contain any plant. After the lapse of nine days, (during which time the absorbed fluid was replaced by water,) the plants, which seemed in a very healthy state, having grown 7 centimetres (nearly 3 inches) and sent forth long white roots, were taken out. The comparing fluid evaporated yielded a dry extract weighing 39 milligrammes, (.6006 grs.) whilst that of the liquid left by the plants, weighed only 33 milligrammes, (.5082 grs.)

"This experiment was remarkable, first, from the circumstance that the liquid containing the plants partially lost its color: secondly, from the perfect transparency of this solution compared with the change which the comparing liquid had sustained, this latter being altogether turbid: thirdly, for the quantity of water evaporated from the plants. This amounted, at a temperature of nearly 22° Centigrade, (= 68° Fahrenheit,) sometimes to 3 1 2 times the weight of the plant, in the space of 24 hours.

"In some of my experiments on the absorption of organic extracts, the roots suffered, became black, especially at their extremities. By replacing the absorbed liquid with water, the solutions did not lose their color, and the weight of the extractive dry residue was sometimes greater than that of the extract previous to absorption.

"It appears that these operations are exposed to two different influences; first, the absorption of the nourishing substance; and secondly, to the replacement of humus by organic matter yielded by the decomposition of the plants. In case the latter influence prevails, or even when both influences are equal, the quantity of substances consumed in the nutrition of the plants, could not be defined. This, I conceive, explains the discrepancy of the results obtained by M. Harteg.

"Having thus proved the absorption of humus by the roots, it remains for me to refer to the assimilation of the said humus after having entered the plants. One of the proofs of this assimilation is derived from the absence of that peculiar coloring matter of the humus in the interior of those plants which have absorbed a strongly colored solution of humate of potassa, as compared with the different effects of coloring matters, (such as ink, &c.,) which are not fitted for the nutrition of plants. The latter leave behind them traces of their passage, while the former are changed and partly assimilated by plants. A bean plant of fifteen inches high, whose roots were plunged in a filtered decoction of Brazil-wood acidulated with a a little alum, was not able to absorb one-fifth of its weight of this solution which dyed of a red color four-fifths of its stalk before it withered; whilst Knot-grass, *(Polyganum persicaria,)* grew very well in the same liquid, absorbed its coloring components, and showed no trace thereof in the stalk; but when, on the other hand, a similar plant was absorbed in dilute ink, it received a blueish color from absorption, which at the same time caused it to wither. The coloring matter of Brazil-wood underwent a change during its partial assimilation by the knot-grass; whilst in the bean plant, for which it was unfit nutriment, no decomposition ensued."

[Here end Saussure's experiments. If you wish for Liebig's remarks on them, I will send them for your paper, next following the publication of the above.—S. L. D.]

☞Dr. Dana would add to the obligations we are already under to him, by furnishing as the remarks of Liebig which he mentions.—Ed.

*"This humic salt was prepared by boiling, for several minutes, sifted mould, from Meudon, with half its weight of bicarbonate of potassa, using 40 times its weight of water. The solution was then diluted with a quantity of water sufficient to maintain the perfect nourishment of the plant."

*"The fertile mould of which we speak, does not effervesce with acids. Burnt, it leaves behind 0 22 of earthy matter and metallic oxides, combined with several salts. Moistened with a little water, in consequence of the partial solubility of organic matter, it enters into fermentation, if the air be excluded by a jar over a mercurial bath, and disengages carbonic and acetic acids, which, previous to fermentation, were not contained therein. The first infusion of this extract, contained (like most moulds) about one-fourth of deeply colored grape sugar, besides much destrin, a substance containing azote, with a deposit of extractive, some traces of nitrate potash, nitrate ammonia, muriate lime and muriate potash. It left 14 1-2 per cent. of ashes, containing 3 per cent. of salts soluble in water, of which 1-10 was carbonate of potassa. It contained phosphate of lime and potass, and other alkaline salts. That portion of the ashes which was insoluble in water, contained chiefly phosphate of lime, metallic oxides, and silica."

Corn and Crows.—As the season for corn-planting is approaching, it may be of service to know how to prevent the depredations of crows.

"Take after the rate of one pound of copperas to a bushel of seed corn: dissolve in water, and sprinkle the corn with it: the corn may at the same time be rolled in plaster."

This experiment has been tried now for three years, with great success, by a veteran farmer, and he permits me to hand it to you for publication.—*Springfield pap.*

For the N. E. Farmer.

REARING CALVES ON SKIM-MILK.

Mr Breck—In the New England Farmer, of the 21st Feb., last, over the signature of "Anti-Skim-milker," is an article which deserves a passing notice. It is not a little amusing to one who has been in the practice of raising calves for fifty years, to read the confident opinions of one who is evidently but little acquainted with the subject.

"Anti-Skim milker" says "it is as unnatural" (that is skim milk for raising calves,) "as it is impolitic—and they who adopt it for present gain, do it, most likely, at the expense of future loss." "*Most likely*":—if the writer knows any thing about it, why not tell us what he knows? New England farmers are *matter-of-fact* men; they want facts well attested.

The writer goes on to say, "As to 'skim milk' or 'skim milk' *fixens* being proper food for calves designed for rearing, the bare *idea* is ridiculous enough, and no one, it may be supposed, who consulted his true interest, would practice it," &c.

For sixty years the writer of this has been somewhat conversant with raising calves, and for nearly fifty years been in the annual practice of it, and by this time, if not a very dull scholar, ought to *know* something, rather than *guess*. It is all a whimsical theory that there cannot be as good cattle raised on skim milk, as to size and shape, as in any other way. They are more hardy, make better working oxen; and for cows, quite as likely to make good milkers, and quite as good to propagate from.

Why, sir, I have raised calves on skim milk, that, when grown to oxen, were as handsome as any others, and weighed, when slaughtered at Brighton, 26 cwt., and cows that weighed 10 cwt., and had 120 lbs. rough tallow.

One objection to raising calves by letting them suck a cow till some months old is, that it makes too much bone—especially the legs are apt to be too large, and not so firm as those which have a less rapid growth when young; and they are more apt to tire when worked.

Once more, and I have done with "Anti-Skim-milker." He says—"Why do we deem it essential to nourish our babes with *good*, rich milk, when taken from the mother?" &c. Those who understand raising "babes" *do not:* it is too rich and hearty for their health, Much better for them that it be skimmed or watered. Why, sir, I have had, (or rather my wife has had,) some experience in raising "babes"—and it was our practice to water the milk given them; and so far as my knowledge extends, it is the general practice in the country, where we have *rich milk*, to water it.

A SKIM-MILKER.

Westboro', March 25, 1844.

Peach Trees.—A correspondent of the Morris Jerseyman says:—"I am satisfied that screenings of anthracite coal are a good protection of peach trees against worms. I placed around each tree, a box, two feet square and six inches deep, and filled it with the coal; and they have no indication of worms about them."

The eye of a master will do more work than both his hands. Not to oversee workmen is to leave them your purse open.—*Franklin.*

From the Albany Cultivator.

CULTURE OF FRUIT.

Grafting.—One of the most important operations in the culture of fruit trees, is the propagation of varieties by *budding* and *grafting*. By means of these, we exchange the unpalatable fruit of the wilding for the most delicious productions which art and nature combined have been able to furnish. And there are few gardens or orchards which might not be greatly improved by the introduction of the best varieties, the cultivation and care of which cost no more than that of the most worthless.

Budding and grafting have their respective advantages and disadvantages. Budding requires less skill and care, but needs the subsequent attention of removing the ligatures, and heading down the stocks. Grafting does not need this subsequent care, but more skill is requisite in the operation. The peach and nectarine can rarely if ever be propagated by grafting; and budding cannot be performed on large and unthrifty stocks, which may often be successfully grafted.

Books on gardening describe many different modes of grafting; but the multiplicity of these often more bewilder the learner than instruct him. By understanding the *essential* requisites, the operation is at once simplified, and it may be varied at pleasure without danger of failure. The two chief points are, *that the sap flowing upward through the stock pass freely into the graft, and that it returns without interruption from the inner bark of the stock.* To secure these, both the wood and bark in the stock and graft must be so cut as to admit of being placed in close contact, and when so placed, the line of separation between the bark and wood, should, on one side at least, exactly coincide in both.

The most common and useful modes are the *whip* and *cleft grafting*. Whip grafting is adopted where the stock and graft are of nearly equal size. To perform it, the stock and graft are cut off obliquely with an equal degree of slope, so as to leave two smooth straight surfaces which may be brought into close contact. A transverse cleft with the knife is to be made near the middle of each of these surfaces, about one-third of an inch deep, so that when they are pressed together, the tongue and slit thus made in each, may mutually and firmly interlock. It is then usual to bind them to their place with bass or corn husk; but it is better to have the jaws of the cleft in each so firmly pressed together as to render this unnecessary. The whole is then to be closely wrapped in a grafting plaster.

Where the stock is more than half an inch in diameter, cleft grafting is preferable. The stock is first cut off horizontally, and a split made in it at the middle of the cut surface an inch or two in depth; in this, the graft, cut wedge-like, is inserted. To do it properly, it is requisite that the graft be so cut as to fit the split as nearly as possible, which is to be opened by a wedge on the side opposite from the place for the graft, and that the jaws of the stock be strong enough to press the sides firmly and closely. After this, the plaster is applied.

It is convenient in grafting, to have two knives, one chiefly for cutting, and the other very sharp, for smoothing the surfaces for contact.

All the branches and buds on the stock must be carefully removed, that the sap may all go to the nourishment of the graft. Failure is often caused by a want of this care.

In heading down old trees, it is a common practice to graft into the large branches; it would be much better to cut off those branches, and to graft or bud into the young shoots which spring up in their places.

The practice of using clay to cover the wounds, is now nearly superseded by the far neater and better mode of applying plasters of grafting wax. These are made the most readily and cheaply by spreading the warmed wax over a sheet of unsized paper with a knife, or with a brush when melted, and afterwards cutting up into plasters of the requisite size. The best and cheapest wax is made by melting together one part of beeswax, two parts of tallow, and four of rosin.

As grafting early in spring is generally preferable, (more especially for the cherry,) it becomes necessary in cool weather, to soften the wax by artificial heat. A kettle of coals, or a lamp, may be used for this purpose.

Budding.—Budding is always to be performed when the bark peels freely, which takes place when the stocks are in a rapidly growing state. Cherries and plums should always be budded by the middle of summer; apples and pears often continue growing rapidly a month later, and peaches may be done even as late as the commencement of autumn.

It is indispensable to successful budding, that the stock be thrifty, and the shoot in which the bud is inserted, not more than a year or two old. No skill can succeed in old or stunted stocks. For the *cambium*, or mucilaginous substance between the bark and wood, which hardens into the new wood, and which cements the bud to the stock, exists only in sufficient quantities for this purpose in fast growing branches.

Every bud is an embryo plant, and the object is to transfer this from one tree to another. To effect this, it is only necessary that the bud be cut smoothly from the shoot with a very small portion of wood with it, and inserted under the raised bark of the stock, in close contact with the cambium. Provided the stock is thrifty and growing; the bud smoothly cut off, and closely and evenly applied to the stock; the cambium uninjured by removing the barks; and the bud be kept to its place a few days by a ligature of moderate pressure; it is of little consequence how the operation is performed, and there can be little danger of failure.

The common way of cutting the bark to remove it, is to make a transverse cut and longitudinal slit just through it, like the letter T. The bud is then slid downwards under the bark, in the middle of the slit. Whatever mode is adopted, the bark should be *lifted* by placing the knife at the edge, and not by running it *under*, as this always injures the cambium. After the bud is inserted, the whole should be covered, except the bud itself, with a ligature of moistened bass, corn husk, tow, or other soft substance, bound round it with just sufficient force to press the bud closely on the stock. In about two weeks, or as soon as the ligature begins to cut into the stock, it must be removed. Early the following spring, the stock is to be cut off a quarter of an inch above the bud, and in a direction sloping towards it, and all the branches and other buds carefully removed, that the whole of the nourishment may go to its growth.

Macedon, Wayne co., N. Y. J. J. T.

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

Edited by Joseph Breck.

Boston, Wednesday, April 10, 1844.

SOWING CLOVER WITH OTHER GRASS SEED.

Mr Editor—As the season is at hand for sowing spring grain, and as most farmers sow their grass seed at the same time, I have thought I would offer a few remarks, and point out what I think is a mistake in many farmers, at least in the section of the country where I reside, in not sowing clover with other grass seeds.

For some years past, many farmers have neglected sowing clover seed. They say the northern, on well manured land, grows so rank that it lodges, and it is difficult to get it dry enough to be carried to the barn, without shattering most of the heads and leaves, and their stock will not eat the coarse stalks. The southern is too early for other grasses, and is liable, in making, to lose its leaves, and produces a small crop when sown alone.

Some of the above objections are true. If, after the clover is mown, it is spread and turned in the middle of the day, and raked into winrows and rolled into cocks—and the next day opened and turned and shook up several times, as practiced by some farmers, it is no wonder that their cattle will not eat it, and that they will not sow it. But there are some good and observing farmers who continue to sow it, believing their land is benefited by it, although they do not consider the first crop of so much value, yet they think upon the whole they get as great an amount of hay in the course, (after the clover has disappeared,) before again plowing up, as the decaying roots of the clover afford food for the other grasses, and leave the ground open for the admission of air and water.

In securing my clover for several years past, I have pursued the following method: When about half of the heads have turned brown, in good bright hay weather, I commence mowing after the dew is off,—let it remain in the swarth until 4 or 5 o'clock, P. M.,; then with the fork commence at the end of a swarth, and take up a flake, and put it forward, and take up another, and so on, till I get a forkfull; this is placed on the warm dry ground, between the swarths, and follow taking up flake after flake, and forkfull after forkfull, till I judge the cocks contain about fifty pounds; rake up the scatterings, and let it remain in these small heaps till about the same time next day, when I make them into large heaps by putting two or three into one; third day after the dew is off, turn them bottom upward, and in a few hours they are fit to cart in. I have always till last season, sprinkled a few quarts of salt to each load, but last year I used no salt. I put some 12 or 15 tons of hay, mostly clover, into my barn, cured in this way, and am now feeding it to my cattle, which eat it as clean and freely as any hay I have given them. The leaves and heads are all on, and as fresh and of as good color as when mowed. But I am satisfied that the salt is beneficial to my stock, although not required to prevent the hay from heating or becoming musty, and shall in future salt my clover hay. I can safely recommend this method to all who raise clover for hay. But in connexion with this, there seems to be one or two important considerations. Every person who has been familiar with the agricultural papers for the last fifteen years, must be aware of the great advantage the farmers of the Middle, and the planters of the Southern States have derived from the cultivation of clover in connexion with lime and plaster of Paris. The long tap-root of the clover penetrates to a depth on their worn-out lands, below where the fibrous roots of corn and wheat had ever reached, and it finds in the unexhausted subsoil, those essential salts that have been exhausted in the top soil by long cropping; and its abundant leaves extract from the air the necessary carbon; and by plowing in the clover, it replenishes the soil with decaying vegetable matter, which is soon converted into humus. This course gives them increasing crops of corn and wheat, and, continued for a few years, restores their exhausted soils to their pristine fertility. Beside the above, there seems to be another good reason why clover should be more generally cultivated here at the North, where all our hay crops are wanted for winter forage. At page 24, of Dr. Dana's Prize Essay, he says, "Clover is twice as rich in nitrogen as herdsgrass, and that the kind of a green crop turned in, materially affects the value of the process. While the straws of the grain-bearing plants afford for every ton of green crop turned in, about three-fourths of a pound of ammonia, green cornstalks and herdsgrass about five pounds of ammonia per ton, red clover affords about seventeen pounds per ton. The very great value of clover in enriching land, is thus made evident."

Without doubt, the ratio of nitrogen is relatively the same in the green and dry herdsgrass and clover, and supposing the coarse stems of the clover hay are not all eaten, if it goes into the compost heap as litter, it is twice as valuable as herdsgrass, and ten times the value of rye straw for manure, and the manure from what the stock did eat, would be valuable in the same proportion.

In the N. E. Farmer, of March 20th, Mr Phinney recommends the practice of seeding down land to grass after the grain crop is taken off, by plowing in the stubble and sowing the seed in September,—and his opinions on all matters pertaining to the farm, are of the very highest authority. I would suggest that where such a course is to be pursued, if it would not be money well expended, to sow a few pounds of southern clover seed per acre with the grain, for the *express* purpose of plowing in with the stubble for manure. By its decomposition, it would afford heat, moisture and food, to the young and tender herdsgrass and redtop, and be a preservative against drought. B.

Boston, April 3d, 1844.

To the Editor of the New England Farmer:

Dear Sir—I regret to find by Mr Teschemacher's letter, inserted in your last paper, that he thinks I must have misunderstood him in reference to his opinion on my artificial guano. He evidently refers to a subsequent conversation; for at the time he stated to me his opinion respecting its agricultural value, nothing was said about its cost, and but little on its composition. At the Conservatory, where I saw the plants marked as treated with my artificial guano, he remarked that it was twice the strength of the natural guano; and subsequently at my laboratory, that it was "twice as valuable as the natural guano." This latter remark I communicated a few moments afterwards to one of my pupils, who well remembers the statement. I do not suppose Mr Teschemacher intended to withdraw his approval, this being evident from his letter; but I suppose he may probably have forgotten the conversation. As to the experiments, I was not made aware of their extent, but merely learned that they were interrupted by the fire at the Conservatory.

Entertaining the highest respect for that gentleman and for his science and skill in horticulture, I may perhaps have done him injustice in not notifying him that I was about to publish his opinion, that he might have stated it more fully and satisfactorily to himself.

Respectfully, your ob't serv't,

C. T. JACKSON.

P. S.—Having seen Mr T. since the above was written, I find he objects only to the word "*proved*"—and I agree with him that the extent of the experiments would not warrant its unqualified application.

PREPARING HOT-BEDS.

The Western Farmer and Gardener gives the following directions for the preparation and management of hot-beds:

"The situation should be on the southern side of a board fence or building. Take out the earth to the depth of a foot, a foot wider than the frame, and if in clay, where water is likely to stand, cut a drain from it. Then with two loads of hot unrotted horse manure, mixed, when it can be done, with leaves, corn-husks, or any such substances as ferment more slowly, it may be filled in, beating it a little with the back of the fork, but never treading it, as it otherwise will settle unequally. Put on the frame and the glass for a day or two, covering them up with some matting or cloth at night, to start the fermentation. Then put on about six inches of good fine earth, and after letting this stand a day or two, till the heat begins to rise, sow the seeds in shallow drills, or broadcast. To those who have never seen a hot-bed prepared, it will not be amiss to say, that the frame is the four sides of a box, of a foot in height on the lower side, and a foot and three inches on the upper, upon which the glazed sash rests at a slight inclination, to carry off the water; the sashes may be of any size, but the most convenient is five feet by four.

After Management.—The ground, until the seeds have started, requires to be kept well moistened, and the frames mostly closed, but if the heat be too great, the seeds may rot: from 50 to 60 deg. Fahrenheit will be the heat at which the bed should range. After the plants are up, then open the sashes in every pleasant and mild day; at first only a few inches at a time, to let off the moisture, which might otherwise rot the plants, and to make them grow strong and healthy. If kept under the glass with great heat and moisture, they grow weak and spindling; they will often require thinning as the spring advances; give more and more air on fine days, until the sashes can be taken off entirely during the day, as the object is to get the plants perfectly accustomed to the state of the atmosphere which exists about the first of May, at which time it is usual to transplant them into the open ground. The nearer the glass can be put to the surface of the ground, the better the plants will grow, and as they increase in size, the frame may be raised. If the weather should be cold after the seeds are put in, fresh and hot manure should be put around the outside of the frame as high as the top, covering the glass at night, and sometimes during the day, if the cold is intense. Cucumbers and other plants which do not bear transplanting well, may be started in pots, or upon square pieces of turf, and removed without disturbing the roots."

MASS. HORTICULTURAL SOCIETY.

EXHIBITION OF FLOWERS.

Saturday, April 6, 1844.

From Parker Barnes—a magnificent specimen of Azalea indica hybrida, in full bloom. This plant was grown in a parlor, and has produced its flowers in great profusion for a number of successive seasons.

JOSEPH BRECK,
Chm'n Flower Committee.

NOTICE.

MASSACHUSETTS HORTICULTURAL SOCIETY.

Exhibition of Geraniums for premiums.—The exhibition of Geraniums, for the Societie's premiums, will take place on SATURDAY, 27th inst. Flowers to be placed in the stands by 10 o'clock, A. M.

JOSEPH BRECK,
April 9. 3w *Chairman of the Flower Com*

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, to the week ending April 7.

April, 1844.		7 A.M.	12, M.	5, P.M.	Wind.
Monday,	1	20	34	28	N. E.
Tuesday,	2	19	36	33	N. E.
Wednesday,	3	22	47	44	E.
Thursday,	4	45	66	68	S. W.
Friday,	5	42	53	49	N.
Saturday,	6	32	50	40	E.
Sunday,	7	37	52	50	E.

BRIGHTON MARKET.—MONDAY, April 8, 1844.

Reported for the N. E. Farmer.

At Market 560 Beef Cattle, 75 pairs Working Oxen, 250 Sheep, and 2300 Swine. 100 Beef cattle unsold.

PRICES.—*Beef Cattle.*—Last week's prices were not sustained, and we reduce our quotations. Extra $5.25. First quality $4,75 a 5,00; second quality $4,25 a $4,75; third quality $3,75 a $4,25.

Working Oxen.—Sales, 65, 68, 75, 80, 87,50 and $92.

Sheep.—From $2,50 to $3.75.

Swine.—Prime lots to peddle 5 for sows and 6 for barrows. Lots of a larger size, 4 3-4 for sows, and 5 3-4 for barrows. Old hogs, 4, 4 1 4 and 5. At retail from 5 to 7.

N. B. An error occurred in our report last week, the number of Beef cattle should have been about 100 larger.

WHOLESALE PRICES CURRENT.

Corrected with great care, weekly.

SEEDS. Herds Grass, $2 00 to 2 25 per bushel. Red Top 58 to 65 cents. Clover—Northern, 11 to 12c.—Southern, 9 a 10 c. Flax Seed, $1 50 per bushel. Lucerne, 33 c. per lb. Canary Seed, $2 25 per bushel.

GRAIN. The arrivals of the past week have been few, and the demand for the most part light.

Corn—Northern, new, bushel 58 to 60—Southern, round yellow, old, 00 a 00—Southern flat yellow, new, 56 a 57—do. do. white 51 a 52—do New Orleans, 00 a 00—Barley 00 a 00 —Rye, Northern, 72 a 75—do. Southern, 69 a 70 —Oats, Southern, 30 a 32—Northern do. 35 to 37—Beans, per bushel 1 00 a 1 62.—Shorts, per double bush. 00 a 0 0—Bran, 00 a 00.

FLOUR. During the past week the market has been very inactive for Genesee, and sales have been made of several parcels at a decline in prices, compared with the last weekly report.

Baltimore, Howard Street, 4 mos. cr. $0 00 a 5 00—do. wharf, $0 00 a 4 87—do. free of garlic, $4 87 a 5 00—Philadelphia do. 4 mos. $0 00 a 4 87—Fredericksburg, low l'd 4 mos. $4 87 a 4 94—Alexandria, wharf mountain, 0 00 a 0 00. —Georgetown, $4 87 a 5 37—Richmond Canal, $4 87 a 5 00 —do. City, $0 00 a 0 00—Petersburg, South side $0 00 a 5 25 —do. Country $4 87 a 5 00—Genesee, common, cash, $5 12 a 5 18— do fancy brands $5 25 a 5 37 — Ohio, via Canal, $0 00 a 0 00—do do New Orleans, cash $4 87 a 5 25. Rye, $3 62 a 0 00—Indian Meal in bbls. $2 87 a 3 00.

PROVISIONS. The principal transactions have been in Pork, comprising about 1000 brls. clear, mess and prime, of various qualities, at different prices, within the quoted rates.

Beef—Mess 4 mo. new bbl. $6 75 a 7 25—Navy—$6 00 a 6 50.—No. 1, $5 87 a 6 00—do Prime $5 00 a 5 50—Pork—Extra clear 4 mo. bbl. $12 50 a 13 00—do Clear $11 00 a 12 00 do. Mess, 9 00 a 10 00—do Prime $7 50 a 8 00—do Mess from other States,— a — —do Prime do do $0 00 a 0 00 do. Cargo do. 0 00 a 0 00 —Clear do do $00 00 a 00 00—Butter, shipping, 15 a 18—do store, uninspected, 10 a 12—do dairy, 18 cts. a 20—Lard, No. 1, Boston ins. 6½ a 7 —do South and Western, 6 a 6½ — Hams, Boston, 7 a 7½ — Southern and Western, 6½ a 0—Cheese, Ship'g and 4 meal, 3 a 4½ —do new milk, 4½ a 5½.

WOOL. Duty. The value whereof at the place of exportation shall not exceed 7 cts. per pound, 5 per cent. ad val. All whereof the value exceeds 7 cts. per pound, 40 per ct. ad. val. and 3 cts. per pound.

The market is firm for all kinds, with a steady demand; the supplies of fleece and pulled are considerably reduced.

Prime or Saxony Fleeces, washed, lb. 45 a 50 c.—American full blood do 43 a 45—Do 3-4 do 37 a 40—Do. 1-2 do 33 a 35—1-4 and common do 28 a 32 — Smyrna Sheep, washed, 20 a 25—Do. unwashed, 10 a 15 — Bengasi do 6 a 13—Saxony, clean, 00—Buenos Ayres unpicked, 7 a 10—do. do. picked, 10 a 15—Superfine Northern pulled lamb 37 a 40—No. 1 do. do. do. 32 a 35—No. 2 do do do 25 a 30—No. 3 do do do 18 a 20.

HOPS. Duty 20 per cent.

The article sells rather more freely to consumers, and some small parcels have been taken for foreign shipments.

1st sort Mass 1843, lb. 7 a 7½; 2d do 6 a 00.

HAY, 14 to 16 per ton—Eastern Screwed $10 to 12.

EGGS. 12 a 14.

SPLENDID FLOWER SEEDS.

The subscribers have received the following choice Flower Seeds which they offer at 6 1-4 cents per package, except those marked otherwise.

Extra fine German Asters, 8 varieties.
Fine double Balsams (sorts.)
Extra fine do 12½ cents.
Cosmos bipinnatus 12 "
Campanula pulcherrima 12½ cents.
——— pyramidalis alba 12½ cents.
——— do. azurea 12½ cents.
Chinese Primrose 12½ cents.
Cleome Grandiflora 12½ cents.
Didiscus cerulea 12½ cents.
Erysimum Peroffskiana.
Geraniums, from superb flowers 33½ cents.
Lupinus pollyphyllus 12½ cents.
——— var alba 12½ cents
——— rivularis 12½ cents.
——— Crookshankii 12½ cents.
——— splendens 12½ cents.
——— odoratus 12½ cents.
Lophospermum Siandem 12½ cents.
Mimulus Hudsonia 12½ cents.
——— cardinalis splendens 12½ cents.
Madagascar periwinkle 12½ cents.
Pentstemon Millerii 12½ cents.
——— hybridus 12½ "
——— gentianoides 12½ cents.
——— splendens 12½ "
Salpiglossis, fine sorts 12½ "
Schizanthus Hookerii 12½ "
——— obtusifolia.
——— new white.
——— humilus.
——— pinnata.
Portulacci Gilesii, 25 cents.
Phlox Drummondi 12½ "
Verbena, fine scarlet, and from other choice sorts 12½ cts.
——— aubletia.
——— urticifolia—With many other rare sorts.

JOSEPH BRECK & CO.

Boston, April 19, 1844.

FINE BONE MANURE.

The subscribers have on hand, Fifty Barrels of fine pulverised Bone Manure, mixed with the marrow of the bone. It was produced from a manufactory when the bone was sawed in a wet state. It must be a very valuable article.

Also, Fifty Barrels fine Bone Dust, in a dry state, principally saw dust, and the refuse of a manufactory.

March 20, 1844. JOSEPH BRECK & CO.

FINE PICOTEE PINK SEED.

The subscribers have for sale a few packages of Pink Seed, saved from the varieties of double Pinks which were exhibited by them at the Horticultural Rooms, and for which they obtained premiums the last season. This is probably the finest seed of American growth ever offered for sale. Price 25 cents per package. Also extra fine English Picotee and Carnation seed at 12½ cents per package.

JOSEPH BRECK & CO.

Boston, March 6, 1844.

NITRATE OF SODA FOR AGRICULTURAL PURPOSES.

BENJAMIN BANGS, No. 39 & 40, Lewis' Wharf, has for sale, a quantity of the above named article, which has been much approved of in England, and as far as used in this country has been found highly beneficial on grass land, trees and plants generally.

Boston, March 20, 1844. 3m

MUCK MANUAL.

The Farmer's Muck Manual, by Dr. S. L. DANA—price 62 1-2 cents, for sale by JOS. BRECK & CO.

Dec. 11.

JOSEPH BRECK & CO.,

NEW ENGLAND
Agricultural Warehouse
AND
SEED STORE.

51 and 52 North Market Street, Boston.

JOSEPH BRECK & CO. having received a full and general assortment of FIELD, GRASS, GARDEN and FLOWER SEEDS, worthy of cultivation, confidently recommend them as being pure and of the first qualities, unmixed with other varieties; they have no hesitation in saying that their collection of Seeds is the best, and of the greatest variety ever offered for sale at any establishment in the U. States, and would invite all to send in their orders as soon as possible, that they may supply themselves with the choicest varieties in good season for the Spring planting.

The following are a few of the most important kinds which they offer wholesale and retail, viz:

PEAS.

Cedo Nulli, Hills' Early, Early Dwarf, do. Charlton, do. Frame, do. Warwick, Improved Blue Imperial, Woodford's Dwarf Marrow, Bishop's Dwarf, for borders, Knights' Dwarf, Dwarf Marrowfats, Tall do.

BEANS.

Lima, Saba, Horticultural Pole, Dwarf China, do. Mohawk, do. Marrow, Red Cranberry Pole, White do. do. Kidney Pole, Dwarf Kidney, do. Case knife, do. Six Weeks, &c.

CABBAGES.

Large Late Drumhead, Late Sugar-loaf, Green Globe Savoy, Red Dutch, Low Dutch, Early York, Battersea, Vanack, Hope, Early Sugar-loaf, with a complete variety of other kinds.

Long Blood and Turnip Beets, French Sugar Beets, Mangel Wurtzel, Ruta Baga, Long Orange, Early Horn and White Field Carrots, Early and Late Cauliflowers, Broccolis of all sorts, Cucumbers, Melons, Squashes, sweet Marjorum, Sage, Summer Savory, Thyme, and Turnips, more than twenty fine varieties.

They have just received per Ship Minerva, a fine and choice lot of new FLOWER SEEDS, which together with an assortment of over four hundred kinds, comprise the most complete collection ever offered for sale.

FRUIT AND ORNAMENTAL TREES,

Shrubs, Grape Vines, Roses, Dahlias, Green-house Plants, Rhubarb and Asparagus Roots, and all Nursery productions furnished at one day's notice, and when requested, can be packed in mats and boxes, so as to be sent to Europe or any part of America.

Dealers supplied on the most liberal terms with Seeds of various sizes, containing a complete assortment, neatly put up in papers, labelled and sealed ready for retail, with printed directions on each package for its management and cultivation.

GRASS SEEDS,

At wholesale and retail, at the lowest market prices. Also, Kentucky Blue Grass, a first rate article for Lawns. Clover Seed, Red and White, Orchard Grass, Oat Grass, Fowl Meadow, Northern and Southern Red Top, Barley, Oats, Millet, Rhode Island Grass, Buckwheat, &c., &c., of the best quality and for sale low.

AGRICULTURAL BOOKS of all kinds, constantly on hand.

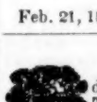
AGRICULTURAL AND GARDEN IMPLEMENTS of all kinds, among which are the following, viz:—1000 Howard's Patent Cast Iron Ploughs, 200 Common do. do, 200 Cultivators, 100 Greene's Straw Cutters, 50 Willis' do, do. 100 Common do. do, 100 Willis' Patent Corn Shellers, 50 Common do. do, 200 Willis' Seed Sowers, 50 do. Vegetable Cutters, 50 Common do. do., 200 Hand Corn Mills, 200 Grain Cradles, 100 Ox Yokes, 1500 Doz. Scythe Stones, 3000 do. Austin's Rifles, 100 doz. Cast Steel Shovels, 150 do. Common do. 100 do. Spades, 500 do. Grass Scythes, 300 do. Patent Snaiths, 200 do. Common do., 500 do. Hay Rakes, 200 do. Garden do., 200 do. Manure Forks, 300 do. Hay do. 500 Pair Trace Chains, 100 do, Truck do. 100 do. Draft do. 500 do. Tie up do, 50 doz. Halter do, 1000 yards Fence do, 25 Grind Stones on Rollers.

TIE UP CHAINS!—Just received by the "Oceanus" 300 Chains for tying up cattle. These chains, introduced by E. H. DERBY, Esq. of Salem, and Col. JAQUES, for the purpose of securing cattle to the stall, are found to be the safest and most convenient mode of fastening cows and oxen to the stanchion.

JOSEPH BRECK & CO.,
N. E. Agricultural Warehouse and Seed Store, 51 and 52 North Market Street, Boston.

Feb. 21, 1844.

FRUIT TREES.



The subscribers are prepared to furnish every description of Fruit Trees, and Ornamental Trees, Shrubs and Plants. The autumn is a suitable time to transplant many Trees and Plants, and often times more convenient than in spring. We have as great a variety of Apples, Pears, Cherries, Plums, Peaches, Quinces, Currants, Gooseberries, &c. as can be found in the country, and offer them at the lowest prices. JOSEPH BRECK & CO.

Boston, Oct. 11, 1843.

MISCELLANEOUS.

An Irishman once went out a shooting, and not being much acquainted with the use of a gun, overcharged his piece—at the first discharge, which was aimed at a squirrel, poor Patrick was unceremoniously poked over backwards by the retreating disposition of his gun. The squirrel ran up the tree chippering, upon observing which, paddy jumping up and scratching his head, accosted him with "Arrah me honey, if ye had been at my end of the gun ye would not be after doing the like of that, surely!"

All about the Eye.—What part of the eye is like a rainbow? The iris.—What part is like a school boy? The pupil. What part is like the Globe?—The ball. What part is like the top of a chest? The lid. What part is like a piece of whip? The lash. What part is like the summit of a hill? The brow.

The Saddle on Another Horse.—In good old Colony times, says an exchange paper, a lady used to ride on a pad behind a man; now, a man may ride on a pad behind a lady!

WINSHIP'S NURSERY.

BRIGHTON NEAR BOSTON,

Situated on the line of the Boston and Worcester Rail Road, 5 miles from the city.

The season for transplanting is at hand, and all those who wish to supply themselves with choice Fruit and ornamental Trees, can be furnished at short notice with the finest varieties by the proprietors of this celebrated nursery.

Fruit Trees, including all the varieties of Pears, Peaches, Plums, Nectarines, Cherries, &c. &c.

Catalogues may be obtained by applying at the Nursery.

Trees carefully packed to insure safety in long voyages.

Orders left at the New England Seed Store of J. Breck & Co. Nos. 51 & 52 North Market street, will be delivered he day following.

Letters containing orders, addressed to the subscribers,

J. & F. WINSHIP.

March 27, 1844.

CAMBRIDGEPORT NURSERY.

Columbia Street.

SAMUEL POND, NURSERYMAN,

CAMBRIDGEPORT, MASS.

Has for sale a choice assortment of FRUIT TREES, SHRUBS, ROOTS AND VINES.—Among them are the best varieties of Apple, Pear, Plum, Cherry, Peach, Apricot, Grape Vines, Asparagus, Rhubarb, Currants, Gooseberries, Raspberries, Pear Stocks, Apple Stocks, &c. &c. &c.

TREES of an extra size always on hand, and will be delivered to any part of the city, free of expense.

Also scions of Pears, Plums and Cherries.

NONANTUM HILL.

NURSERY OF WILLIAM KENRICK.

Baldwin and other Apple Trees of fine sizes, 10,000 Peach Trees, also of kinds superior and of sizes fine; Pear, Plum, Cherry, Apricot, Nectarine Trees of kinds new or most highly esteemed.

This nursery, by late extensions, now covers 30 acres of ground. A large green house is now being added.

Franconia Raspberries, Grape Vines, Currants Gooseberries, Strawberries—of kinds most approved. The descriptive Catalogue for 1843 will be sent to all who apply.

Ornamental Trees and Shrubs, and Honeysuckles; yellow Harrison and other Roses; Tree and other splended Pœonies of different colors. Also, Myatt's Victoria and other new kinds of Rhubarb, double Dahlias, &c. &c.

All orders addressed to the subscriber will be promptly attended to, and Trees when so ordered will be securely packed in mats and moss for safe transport to all distant places, and delivered in the city by the wagon which goes hither daily, or shipped to order, or per railroad. Orders may be left with Joseph Breck & Co. 51 & 52 North Market street, John G. Locke, Esq., or Eliphalet Wheeler, Esq., Framingham.

WILLIAM KENRICK.

March 6. eptM15 Nonantum Hill, Newton.

WARREN'S GARDEN AND NURSERY,

NONANTUM VALE, BRIGHTON,

FLORAL SALOON AND SEED STORE,

No. 1 TREMONT TEMPLE, (late Tremont Theatre) BOSTON.

The proprietor of this establishment is now ready to receive and execute orders for Fruit; Ornamental Trees; Grape Vines; Shrubbery; Roses; Strawberry Plants, &c. in any quantity and of the most valuable kinds at short notice, properly packed and secured for transportation to any part of the United States or Provinces.

The catalogue for 1844 which has been prepared with scrupulous care, contain a list of the choicest sorts of Pears; Apples; Plums; Cherries; Peaches; Apricots and Nectarines; Grape Vines; Raspberries; Gooseberries; Strawberries; Currants; Evergreen Trees and Shrubs; Ornamental Trees; Herbaceous Plants; Roses; Green House Plants; Dahlias, &c.

A new feature has been added in the catalogue which renders it particular valuable for purchasers who are desirous of improving their orchards and grounds by planting only the most approved, superior and productive varieties. It is by columns and abbreviations, the meaning of which is explained under every different kind of fruit, so that a large number of the most important characters by which the different varieties are distinguished may be seen at a glance.

While the list of fruits may not be found so extensive as in some other catalogues, it contains every kind of value, and all new and improved varieties are added as soon as their qualities are tested. Nevertheless any variety that may be ordered can always be supplied, on as reasonable terms as are afforded any other nurseries.

The list of *DAHLIAS* comprises upwards of 300 of the choicest varieties of this gorgeous and splendid flower, most of them prize varieties. Dry roots ready for delivery early in the spring, and in pots from the middle of April to the 1st June.

STRAWBERRIES of the most productive and best varieties, for sale in any quantity. None but healthy and strong plants will be suffered to leave the nursery.

GRAFTS and *SCIONS* of most of the kinds named in the Catalogue can be obtained in their season.

GREEN HOUSE PLANTS, of all the rare and splendid kinds, always on hand at the Saloon, where visitors are respectfully invited to call.

GRAPE VINES; ASPARAGUS, and other roots constantly for sale.

Also, a great variety of choice *GARDEN* and *FLOWER SEEDS*, all of this year's growth, and warranted fresh, genuine and true to their names.

Agricultural, Horticultural and Botanical Books.

Gardening Implements; Flower Vases, &c. &c. The whole enumerated in a new descriptive Catalogue, which will be given *gratis* on application. All orders for trees will be delivered at one day's notice. Every tree and plant will be warranted by the subscriber, as to its distinctive character and goodness.

Boquets and cut flowers, can be obtained any day in the week at the saloon. Flowers furnished for decorations, at short notice. JAMES L. L. F. WARREN.

April 3.

FRUIT AND ORNMENTAL TREES, &C.

S. & G. HYDE'S NURSERY, NEWTON.

The subscribers have for sale a choice collection of Fruit Trees, comprising the best varieties of Apples, Cherries, Peaches, Pears, Plums, &c.

Gooseberries, Currants, Raspberries, Grape Vines, and Quinces.

Ornamental Trees and Shrubs, Honeysuckles, Altheas, Pœonies, Buckthorn, &c.

All orders addressed to the subscribers will receive prompt attention. Trees packed to insure safety to distant places. S. & G. HYDE.

Newton, April 3, 1844.

SCIONS FOR GRAFTING.

Those who wish to obtain Scions for grafting, are reminded that this month is the time to cut grafts. It is important that orders should be sent during the month to ensure execution, as it is impossible to keep a full assortment on hand. We have a supply of the following, cut from bearing trees, viz: *Apples*—Baldwin, Greening, Roxbury Russet, Porter, Hubbardston, Nonsuch, and other varieties.

Pears.- Bartlett, Seckle, Jargonelle, and other varieties can be cut if ordered.

Also, Plum and Cherry Scions.

JOSEPH BRECK & CO.

Boston, March 20, 1844.

GRINDSTONES ON FRICTION ROLLERS.

Grindstones of different sizes, hung on friction rollers and moved with a foot treader, are found to be a great improvement on the old mode of hanging grindstones. Stones hung in this manner are becoming daily more in use, and wherever used, give universal satisfaction. The rollers can be attached to stones hung in the common way. For sale by J. BRECK & Co., No. 51 North Market street.

HOWARD'S IMPROVED EASY DRAUGHT PLOUGH.

Great improvements have been made the past year in the form and workmanship of these Ploughs; the mould board has been so formed as to *lay the furrow completely over, turning in every particle of grass or stubble, and leaving the ground in the best possible manner.* The length of the mould board has been very much increased, so that the Plough works with the greatest ease, both with respect to the holding and the team. The Committee at the late trial of Ploughs at Worcester, say,

"Should our opinion be asked as to which of the Ploughs we should prefer for use on a farm, we might perhaps say to the inquirer, if your land is mostly light and easy to work, try Prouty & Mears, but if your *land is heavy, hard orrocky,* BEGIN WITH MR. HOWARD'S."

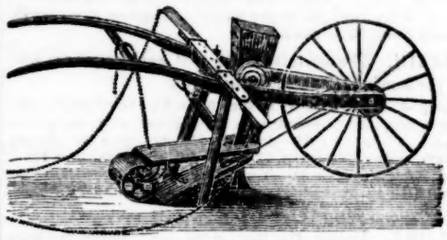
At the above mentioned trial the Howard Plough *did more work, with the same power of team, than any other plough exhibited.* No other turned more than twentyseven and one half inches, to the 112 lbs. draught, while the *Howard Plough turned twentynine and one half inches, to the same power of team!* All acknowledge that Howard's Ploughs are much the strongest and most substantially made.

There has been quite an improvement made on the shoe, or land side of this Plough, which can be renewed without having to furnish a new landside: this shoe likewise secures the mould board and landside together, and strengthens the Plough very much.

The price of the Ploughs is from $6 to $15. A Plough, sufficient for breaking up with four cattle, will cost about $10 50, and with cutter $1, with wheel and cutter, $2 50 extra.

The above Ploughs are for sale, wholesale and retail, at the New England Agricultural Warehouse and Seed Store, Nos. 51 & 52 North Market Street, by

JOSEPH BRECK & CO.



WILLIS' LATEST IMPROVED SEED SOWER.

In using this machine, the farmer may be certain that his seed is put into the ground, and at the same time in the best possible manner. There has been a great difficulty in machines for sowing garden seeds; they are very apt to clog up, and the farmer might go over an acre of land and not sow a single seed; but not so with this; it is so constructed that it cannot possibly clog. In using this sower, the farmer can save one half of his seed, and do the work at less than one quarter the expense of the common way of sowing, and have it done in a much better manner; it opens the furrow, drops the seed covers it over and rolls them down. It will sow any kind of Garden Seeds; say Ruta Baga, Mangel Wurtzel, Turnips, Carrots, Beets, Parsnips, Onions, &c. For sale at the New England Agricultural Warehouse and Seed Store, Nos. 51 and 52 North Market street, by JOSEPH BRECK & CO.

NEW ENGLAND FARMER.

A WEEKLY PAPER.

Terms, $2 per year *in advance*, or $2 50 if not paid within sixty days.

N. B.—Postmasters are permitted by law to frank all subscriptions and remittances for newspapers, without expense to subscribers.

TUTTLE AND DENNETT, PRINTERS,

21 School Street.